Prasar Bharati
(Broadcasting Corporation of India)
Doordarshan Kendra: Chennai

TENDER NOTICE

No. 9(2)130/DKC/Aug.&Repl.of Cap.Assets/200TR Cooling Tower/2011-12/ Dated: 14/03/2012

The Dy. Director General (Engg.), Doordarshan Kendra, Chennai, on behalf of President of India, invites tenders for the work cited below from reputed contractors, who fulfill the qualification criteria on prescribed under Sl. No. 11 below:-

1. NAME OF WORK	: **SITC of 200TR Cylindrical Bottle shape Induced Draft Cooling Towers** (2 Nos.) for Doordarshan Kendra Chennai (Tamil Nadu State) as per the attached technical specifications (Annexure-I)
2. ESTIMATED COST	: Rs. 7,00,000/- (for 2 towers)
3. EARNEST MONEY DEPOSIT	: Rs. 14,000/-
4. TIME ALLOWED FOR COMPLETION OF WORK	: 30 days from issue of order.
5. LAST DATE OF ISSUE OF TENDER PAPERS	: 23/03/2012
6. LAST DATE AND TIME OF RECEIPT OF TENDER.	: 29/03/2012 up to 12.00Noon
7. DATE AND TIME OF OPENING OF TECHNICAL BID.	: 29/03/2012 at 15.00 Hrs
8. DATE AND TIME OF OPENING OF COMMERCIAL BID	: Will be intimated to the qualified tenderers after opening & evaluation of Technical bid.
9. DATE AND TIME OF PRE-BID MEETING.	: Any day between 21/03/2012 to 23/03/2012 during office hours.
10. VALID PERIOD FOR ACCEPTED	: 3 Months.
11. QUALIFICATION CRITERION	: Certificate from reputed firm(s) for at least three similar works carried out satisfactorily should be enclosed with the application for tender documents. Also attendance of pre-bid meeting is mandatory.
12. SPECIAL NOTE	: The tenderer has to submit EMD, Technical Bid and Commercial bid separately properly sealed by wax in separate envelops. Tenderers may contact the following telephone numbers for any clarifications, if required: Tel. 044- 25361975,

FOR AND ON BEHALF OF THE PRESIDENT OF INDIA

Prasar Bharati
(Broadcasting Corporation of India)
Doordarshan Kendra: Chennai

No. 9(2)130/DKC/Aug.&Repl.of Cap.Assets/200TR Cooling Towers/2011-12/ Dated: 14/03/2012

1. DESCRIPTION:

Sealed tenders are hereby invited for and on behalf of the President of India from reputed firms for the following supply of material / works: -

SITC of 200TR Cylindrical Bottle shape Induced Draft Cooling Towers (2 nos.) at Doordarshan Kendra Chennai (Tamil Nadu State) as per the attached technical specifications (Annexure-I)

The tender shall consist of three parts (bids) namely:

i) E.M.D.:- As per clause 7 of this tender document, E.M.D. should be enclosed in a separate sealed envelope. Technical bid will be opened only of those tenderers who have submitted the required E.M.D. Without EMD tender will be liable to rejection.

ii) TECHNICAL BID: Technical bid should contain the confirmation to the enclosed technical specifications. **Tenderer should sign with rubber stamp on every page of the tender document** and the same should be submitted (except Annexure – III) along with technical bid. The envelopes should be super scribed as **"Technical Bid for 200TR Cooling Tower"** and **sealed with red lac or red wax**.

iii) COMMERCIAL BID: The commercial bid should contain the price bid and acceptance of the commercial terms and conditions of these tender documents. Tenderer should quote their rates on **Annexure – III** (**Schedule of material/works**) and this page should be removed from the tender document & kept in the commercial bid envelop. Tenderer should indicate their VAT/ST/CST/TIN registration number. The commercial bid envelopes should be super scribed as **"Commercial Bid for 200TR Cooling Tower"** and sealed with red lac or red wax**.**

2. The technical bid (1 No.), commercial bid (1 No.) and EMD (1 No.) will be submitted in sealed envelopes separately with the names of the supply of Material/Work, date of opening and the bid enclosed written on the envelopes.

The above mentioned **three envelopes** should be enclosed and submitted in another large size envelope duly sealed with red lac or red wax and super scribed with the name of supply of material/work, date of opening. The completed tender in all aspects shall be addressed to:

The Dy. Director General (Engg),
(By Name: Shri. V.Gnanarajan, DDE)
Doordarshan Kendra,
Swamy Sivananda Salai,
Chennai – 600 005

Quotations not properly supercribed **and sealed with red lac or red wax** will not be considered and liable to rejection**. The pre-bid meeting shall be held at this Kendra any day between 21/03/2012 to 23/03/2012 during office hours.** The tender will be received at this office by post or in person up to 1200 Hrs on ***29/03/2012***. The technical bid and E.M.D. will be opened on the same day at 15.00 hrs. Opening of Commercial bid will be intimated to technically qualified tenderers after opening and analyzing of technical bid. **The tenders submitted by the tenderer, who have not attended the pre-bid meeting will not be accepted and summarily be rejected.**

3. VALIDITY

The tender shall be kept valid for three months from the date of opening of commercial bid.

4. PRICES, DUTIES AND TAXES:

A. PRICES: The prices quoted should be firm and for free delivery at DDK Chennai, inclusive of transit insurance, excise duty and entry tax if any. Tenderers should quote in figures as well as in words the amounts tendered by them. In the case of illiterates, the rates or the amounts tendered should be attested by a witness.

The tenderer must quote separately item wise price of all the items that constitutes the system including the cost of Civil works, Water Pipe modification works (if any) etc., Prices of all the optional items should also be quoted separately.

B. DUTIES AND TAXES:

i) Excise Duty:

The prices should contain an element of Excise Duty which should be indicated separately. Any statutory variation in the excise duty-taking place after acceptance of tender within the delivery date will be adjusted by the purchaser on production of documentary proof.

ii) SALES TAX/Service Tax:

The prevailing rate of ST/CST/VAT should be clearly mentioned in the tender separately. The following certificates are to be submitted by the supplier along with the bills.

"Certified that the goods on which the sales tax has been charged have not been exempted under central sales tax act of the rules made there under". The amount charged on account of sales tax on these goods is not more than what is payable under provision of the relevant Act or the rules made thereunder.

Certified that we are registered as dealers in the State under registration No. for the purpose of Sales Tax/Service Tax. "Any statutory variation in ST/CST/VAT taking place after acceptance of tender within the delivery date will be adjusted by the purchaser".

Tenderer should indicate their VAT/ST/TIN registration number and PAN details on their technical bid as well as in commercial bid.

5. TERMS OF DELIVERY:

F.O.R. Destination at DDK, Chennai.

6. DELIVERY PERIOD / COMPLETION OF WORK: -

Tenderers may note that the entire supply & work shall be completed within 30 days from the date of the order.

7. EARNEST MONEY DEPOSIT:

Earnest Money amounting Rs.14,000/- (Rupees Fourteen thousand only) in the form of Demand Draft on a Nationalized bank drawn in favour of Addl. Director General (Engg) (SZ), AIR&DOORDARSHAN, Chennai-5 should accompany the tender in a separate envelope superscribed with the name of supply/work, opening date, etc., E.M.D. by means of Bank guarantee or any other mode of payment other than DD shall not be accepted. Tenders without EMD shall be summarily rejected and their technical cum commercial bid will not be opened at all.

EMD of all but the last three tenderers will be returned back within 10 days of opening of tenders. EMD of the remaining two tenderers other than that of the successful tenderer will be returned after finalizing the contract. EMD of the successful tenderer will be returned after receipt of performance guarantee as mentioned in the Clause 5 of General Terms and Conditions of the tender.

8. EXPERIENCE:

   The tenderers should give documentary proof for having supplied & installed similar cooling towers to other customers and should enclose the user list clearly mentioning the name of the users / installations. The tenderers without the user list shall be rejected out rightly.

9. TECHNICAL SPECIFICATIONS AND GENERAL TERMS AND CONDITIONS :

   For technical specifications see Annexure-I and for other general terms and conditions see Annexure-1I.

10. ACCEPTANCE / REJECTION OF TENDER:

    The acceptance of a tender will rest with The Deputy Director General (Engg), Doordarshan Kendra, Chennai – 600005, who does not bind himself to accept the lowest tenderer and reserves to himself the authority to reject any or all of the tenders received without assigning any reason.

11. A point by point compliance statement, in respect of all the points, sub-points in the specification is to be enclosed along with the offer. **Compliance statement in the format as mentioned in clause 5 of the Technical Specification only shall be accepted**. **Offers without the compliance statement or incomplete compliance statement will be rejected with the sole responsibility of the tenderer.**

12. GENERAL:

    Canvassing in connection with tender is strictly prohibited and the tenders submitted by tenderers who resort to canvassing will be rejected.

13. **Tenderer should affix his signature with rubber stamp at the bottom of pages of every page of tender document and drawings**.

14. **The bidder should essentially visit the site where the existing cooling tower is erected for studying the suitability (Model, Size) of the product to be quoted and also the works to be carried out**.

For DEPUTY DIRECTOR GENERAL (ENGG)
DOORDARSHAN KEDRA, CHENNAI

Encl:

1. Technical specifications, Annexure-I.
2. General Terms and Conditions – Annexure-II
3. Schedule of Material/WORKS – Annexure - III

ANNEXURE – I

SITC of 200TR Cylindrical Bottle Shape Induced Draft Cooling Towers at DDK, Chennai

1. SCOPE:

The specification aims at replacing existing bottle shaped 200TR Induced draft cooling towers (**two numbers**) on Supply, Installation, Testing and Commissioning (SITC) basis, serving the 4 x 80TR chilled water centralized Air-conditioning system at Doordarshan Kendra, Chennai.

2. GENERAL REQUIREMENT:

a. The successful bidder should dismantle the existing two Cooling towers, carryout the required foundation works and carry out suitable inlet & outlet water pipe line modification works required for the offered Cooling Towers.

b. **The bidder should quote the buy back value for the existing cooling towers and also should quote the 2nd, 3rd and 4th year buy back values for the newly supplied Cooling Towers which will facilitate Doordarshan in disposing the Cooling towers during the overall replacement of existing centralized chill water Air-conditioning system**.

3. ESSENTIAL FEATURES:

a) The offered product should be a well reputed make, meeting the specification and field proven. The firm should enclose the client list to whom this product has been supplied and functioning as on date. Any locally assembled and non reputed product will be summarily rejected.

b) The offered cooling tower should be cylindrical bottle shaped functioning on Induced draft counter flow cooling technology.

c) The basin/sump and the casing of the cooling tower should be rugged, sturdy and corrosion/rust free to resist water born bacteria & organisms. The supports should be fabricated with heavy gauge C type hot dip galvanized steel for providing long life and durability. The basin should have basic facilities for overflow, drain and make up valve of brass make with plastic float.

d) The Casing and Basin should be made out of Fiberglass reinforced plastic (FRP) with both sides Gel coated for smoothness from inside and pigmented from outside.

e) The cooling tower should use fills made of Poly Vinyl Chloride (PVC) to increase the surface area and time of contact between the air and water flows. The fill should be packed in such a way that efficient heat and mass transfer simultaneously. The fills should be corrosion free and easily cleanable.

f) The fan drive motor should be rugged, efficient and weather proof meeting IP55 standard with 'F' class insulation. The fan should be directly driven by the special extended shaft motor made from EN8 steel.

g) The axial flow fan should be of dynamically balanced multi blade version with adjustable blade pitch, made of corrosion-resistant FRP. The fan should deliver large volumes of air at low power consumption. The fan should work smoothly with less running noise and longer bearing life including that of the supporting structure.

h) The offered cooling tower must ensure a temperature reduction i.e. range of 5^{o} C between the inlet hot water and outlet cold water. Similarly, the approach i.e. the difference in temperature between the outlet cold water and the wet bulb temperature should be at least 8^{o}C.

i) The rotating water sprinkler head is preferred for evenly spraying the inlet hot water over the fills. However in case of bottle shape tower, spray header and branches along with suitable type of moisture eliminator shall be supplied. The water shall be distributed over the fill by spray nozzles with large orifice openings to eliminate clogging. The pressure drop caused by the drift eliminator should be as low as possible.

j) The air inlet louvers shall be made of PVC mounted in easily removable frames for providing easy access inside the basin for maintenance/repair purposes. The louvers shall be suitably angled to minimize water splash and to prevent direct sunlight on the cooled water collected in the basin.

k) A suitable access ladder made of rust free GI (Rolled channels) material must be fitted with the cooling tower for proving easy access to the fan motor section.

l) The structural of the tower support the casing, basin and motor mounting should be made of hot dip galvanized Mild Steel, so as to resist corrosion.

4. Technical Specifications

1.	Cooling Tower Type	: Induced draft counter flow
2.	Shape of the Tower	: Cylindrical Bottle shape
3.	Capacity	: 200TR
4.	No. of cell	: 1 (One)
5.	Operating Voltage	: AC 3-phase 415V, 50 Hz
6.	Heat Rejection Capacity	: 7500000 K.Cal/H or better
7.	Required Outlet Water Temperature	: 30^{o} C
8.	Inlet Water Temperature	: 36^{o} C
9.	Range	: 5^{o} C or better

10. Approach : 5^{o} C or better

11. Wet bulb Temperature : 27^{o} C

12. Casing, Basin/Sump material : FRP with Gel coating

13. Fills : PVC

14. Fan Motor : 7.5 HP or better, IP55 protection - Class F insulation ISI marked.

15. Fan Type : Direct drive, Axial flow

16. Fan Hub & Blade material : Aluminum extrusion with FRP

17. Sump capacity : 3500 litre

18. Frame, Bolt & Nuts and Misc H/W : M.S Hot dip galvanized/ Graded Steel

19. **Existing cooling tower sump level from ground must be maintained as same for the proposed new towers**.

5. GENERAL

Following general conditions are applicable to all tenderers. These conditions have to be complied for consideration of their offer(s).

5.1 Other essential item(s), if any, which have not been mentioned in this specification, but are necessary to complete the system for its full exploitation, should also be quoted as optional item. The firm should provide the sufficient details of such item(s) to decide about its utility.

5.2 The tenderer/manufacturer should ensure the completeness of the system in their offer.

6. COMPLIANCE

A point by point compliance statement from the principal manufacturer in respect of all the points laid down in this specification is to be enclosed along with the offer in the format given below. Mere signature on the copy of our specification shall not be accepted as a compliance statement.

Compliance statement in the format mentioned below shall only be accepted. The manufacture should also record the performance figures of their equipment offered in the quote for which the compliance statement is enclosed. The figures so mentioned should be supported by record of these in the technical literature enclosed with the tender. **Offers without the compliance statement or incomplete compliance statement will be rejected with the sole responsibility of the tenderer**. **Any deviation from the specification detailed in the compliance statement is to be highlighted separately.**

Sr.No of DD specs.	DD specs.	Compliance (Yes/No)	Performance Fig. of eqpt. Offered.	Deviations, in case of non-compliance	**Optional items** if any reqd. to make the sys. Compliant to DD specs.	Features in the sys. Offered Which exceed DD specs.

7. GUARANTEE

The equipment should be guaranteed for **two** years of trouble free operation from the date of commissioning. Any failure within two years after the delivery of equipment should be replenished free of cost.

8. DOCUMENTATION

One set of the technical literature/ leaflet for all the items quoted in the bill of quote should be enclosed along with the tender for technical evaluation. **Offers without the necessary literature/ leaflet for evaluation will be rejected with sole responsibility of the tenderer.** The successful tenderer has to supply two sets of printed user manual & drawing, along with the equipment. One set of soft copy in the form of CD or DVD. Separate user software CD for panel programming shall be provided. No extra payment shall be made for documentation. If required shall be quoted by the vendor at the time of tendering itself.

9. SPARES

The tenderer should quote for all the essential spares that are required for the smooth functioning of the system for at least two years after the guarantee period is over.

10. INSPECTION

The equipment shall be subjected to inspection before & after supply by officials of DDK, Chennai.

11. ENCLOSURES

The firm must submit the following enclosures along with the tender to facilitate technical evaluation.

a) Point to point compliance statement duly signed by the Tenderer.

b) Technical manuals/Detailed technical literature/catalogues for all the offered items of the product, for substantiating the technical specification.

c) Major Client list of the offered product/system in India.

d) Any other document mentioned elsewhere in the tender document.

The tender is liable to be rejected in the absence of the above enclosures with the sole responsibility of the tenderer.

Indicative Bill of Material (BOM)

Sl. No.	Description of Item/Work	Quantity
1.	200TR FRP Cylindrical Bottle shape Induced draft Cooling Tower including packing, forwarding & insurance etc.	2 Nos.
2.	Installation of 200TR Cooling Tower on building terrace.	2 Nos.
3.	Preparation & casting of foundation for 200TR Cooling Tower.	1 Job.
4.	Assorted pipes required for installation of 200TR Cooling Tower.	1 Lot.
5.	Preparation and making connection from existing 200TR Cooling tower water pipe line to new proposed 200TR Cooling Tower including material & labour.	1 Job.
6.	Dismantling of existing 200TR Bottle shape Cooling Towers (2 nos.) and storing the same in Ground floor.	1 Job.
7.	Making Electrical connection to the Fan motor of the 200TR Cooling Tower including material & labour.	1 Job.
8.	Any other assorted items essentially required.	1 Lot.
9.	Any other assorted works essentially required.	1 Job.

ANNEXURE-II

GENERAL TERMS AND CONDITIONS FOR SUPPLY/WORK ORDER

1. NAME OF PURCHASER : The Addl. Director General (SZ)
AIR & DOORDARSHAN, Chennai for
The president of India.

2. PAYING AUTHORITY : The Addl. Director General (SZ),
All India Radio & Doordarshan
Swamy Sivananda Salai
CHENNAI-600005.

3. PAYMENT TERMS :

i) 80 % of the contract price for the Materials inclusive of excise duty and sales tax shall be paid on initial inspection and receipt of the cooling towers at DDK Chennai in good condition.

ii) 90% of the installation charges (works part) will be released after successful completion of erection and commissioning of the cooling tower.

iii) 10% of total order value (material & works) will be released on submission of Security Deposit equivalent to 10% of the order value in the form of Bank Guarantee or FDR or Demand Draft, otherwise the same amount will be retained as performance guarantee till the guarantee period over.

iv) Balance 10% of material cost will be released after successful completion of erection and commissioning of the cooling tower.

4. BILLS.

All the supplies shall be in conformity with the order and all the part bills shall be prepared in triplicate in the same format as that of the order. All those part bills shall be submitted to the consignee for necessary certificates and onward transmission to the paying authority.

5. PERFORMANCE GUARANTEE.

The contractor shall furnish the performance guarantee within 2 weeks of placement of order at the rate of 10% of the contract value subject to a maximum of Rs 5 lakhs at the time of signing the contract. The performance guarantee shall be furnished in favour of Addl. Director General (SZ), AIR & DOORDARSHAN, CHENNAI in any one of the forms mentioned below.

a) Cash in full.
b) DD payable at Chennai c) bank Guarantee from any nationalized bank valid up to the end of guaranty / warranty period as per contract.

The Earnest Money Deposit received will be returned after receipt of performance guarantee. The performance guarantee shall be refunded in full on completion of successful guarantee/warranty period. If no performance guarantee is furnished, then an amount equivalent to the 10% of the order value will be deducted from the firm's bill and the same will be released after successful completion of guarantee period.

6. DESPATCH INSTRUCTIONS:

The packing and marking of goods shall be as laid down in clause-12 of general conditions of contract DGS & D69 (revised).

a) The contractor shall arrange to despatch the goods duly insured direct to the consignee after prior intimation for delivery at site by whichever mode of transport he may choose, to ensure safe delivery of goods at site. Unloading shall be done at site at the contractor's expense.

b) The contractor must submit his challans in triplicate to the consignee sufficiently in advance of the actual arrival of the stores at the destination failing which he will be held responsible for any subsequent discrepancies between the actual receipt and the material detailed in the challan received later. The challans must also contain the following information:

1. Brief description of stores.
2. Railway / Lorry receipt No. & Date.
3. Purchase order no. No.& Date.
4 Inspection note No & date.

c) The consignment received at site shall be opened and checked for shortages / damages by the contractor himself. He shall show all the materials received at site to the consignee to enable him to certify receipt of stores in good condition. However, in exceptional circumstances, the contractor may request the consignee to check the consignment on his behalf. In such cases the consignee shall notify the contractor of the shortage/ damages immediately on receipt of consignment at site. Expenses incurred, if any, in checking the consignments shall be debitable to the contractor's account.

7. INSPECTION.

i) Pre-Inspection: The material shall be offered for pre-inspection at manufacturer / suppliers premises in India, if required.

ii) Final Inspection: Cooling Tower along with its accessories to be supplied against the work order of this office will be offered for inspection at site also. The necessary drawings, wiring/connection diagram, etc., which are required for installation of cooling tower has to be submitted by the firm at the time of inspection. All the measuring equipments, tools, etc., required for satisfactory testing of the cooling tower has to be arranged by the firm at site.

iii) Inspecting Officer: Authorized representative of the Deputy Director General (Engg), Doordarshan Kendra, Chennai-5.

8. INSURANCE:

The contractor shall arrange for the insurance covering the risk during transit. All the charges for such insurance shall be borne by the contractor.

9. ADDITIONAL QUANTITIES:

The purchaser reserves the right to place order for additional quantity up to 100% of the ordered quantity at the same rates and terms and condition during the currency of the contract.

10. PENALTY FOR DELAY:

If the contractor is unable to complete the work within the stipulated time limit the purchaser may at his option allow such additional time as may be considered justified with/without penalty and without altering terms and conditions of the order. In the event of failure of the contractor to complete the work within the stipulated time or the extended time, the purchaser has the right to impose penalty of Rs.350/- per week or part thereof for every Rs.1,00,000/- of the contract price. The Contractor's liability for delay, however, shall not exceed 5% of the total contract price.

11. GUARANTEE/ WARRANTY:

The Cooling Towers and all other accessories to be supply & installed against this office order shall be guaranteed against any manufacturing defects & unsatisfactory performance for a period of 24 months from the date of delivery. Any parts failing during the guarantee period shall be repaired free of cost by the contractor at site.

12. CONDITIONS OF CONTRACT:

The contractor shall sign a contract agreement form in triplicate in the prescribed proforma and submit the same along with performance guarantee within 15 days. The complete form with the purchaser's signature shall be sent back to the contractor. No supplies will be made start unless the agreement is signed by the contractor and the purchaser.

13. SPECIAL CONDITIONS:

In addition to the terms and conditions contained in the clause 12 above, the contract would also be governed by the following special conditions

i. In case where only a portion of the stores ordered is tendered for inspection at the fag end of the delivery period the purchaser reserves the right to cancel the balance quantity not found acceptable after carrying out the inspection at the risk and expense of the contractor. If however, the stores tendered for inspection are found acceptable the purchaser may grant an extension of the delivery period subject to the following conditions: -

a) That no increase in price on account of any statutory increase in or fresh imposition of customs duty, excise duty, sales tax or on account of any other tax or duty leviable in respect of the stores specified in the supply/work order shall be admissible on such of the stores as are delivered after the expiry of the delivery period stipulated in the work order.

b) That not withstanding any stipulation in the contract for increase in price or any other grounds no such increase which takes place after the date of delivery stipulated in the supply/work order shall be admissible on such of the stores as are ordered after the expiry of the delivery period stipulated in the work order.

c) But, nevertheless the purchaser shall be entitled to the benefit of any decrease in price on account of reduction in or remission of customs duty, excise duty, sales tax on account of any other ground stipulated in the price variation clause which takes place after the expiry of the date of delivery/completion of work stipulated in the work order.

d) The contractor shall not dispatch the stores till such time extension in delivery period / completion of work is granted by the purchaser and accepted by the contractor before and extension letter as aforesaid is issued by the purchaser, the same are deemed to the subject to the conditions set out in proceeding paragraph.

iii) In case where the entire quantity has not been tendered for inspection within the delivery period stipulated in the work order and the purchaser chooses to grant and extension of delivery period, the same would be subject to conditions mentioned in (i) above.

iv) The contractor shall refund any advance/part payment issued to him in respect of the rejected stores within 14 days of the receipt of intimation from the consignee about the rejection of such prices. This is strictly without prejudice and in addition to the rights provided in the clause-17(8) of form DGS & D-67.

v) The contractor is required to replace the rejected stores forthwith but in any event not later than a period of 14 days from the date of rejection and the contractor shall bear all the costs of such replacement including freight, if any, but without being entitled to any extra payment or any other account.

vi) Where under the contract, price payable is fixed F.O.R. dispatching station, the contractor shall, if the stores are rejected at destination by the consignee, be able to, in addition to his other liabilities (including refund of price recoverable in respect of the stores rejected) to re-imburse to the purchaser the freight and all other expenses incurred by the purchaser in this regard.

14. FORCE MAJUERE:

If any time during the continuance of the contract the performance in while or in part by the contractor shall be prevented or delayed by reason of any war, hostility acts of the public enemy, Civil commotion, sabotage, fires, floods, explosions, epidemics, guarantee restrictions, strikes, lock-outs or acts of God

(therein after restrictions refer to as events and provided notice of happenings of any such eventuality is given by the contractor within 21 days from the date of occurrence thereof, the purchaser shall by reason of such event, neither be entitled to cancel this order not shall have any claim for damages against the contractor in respect of such non-performance or delay in performance and delivery shall be resumed as soon ad practicable after such events have come to an end or ceased to exist.

Provided further that if the performance in whole or part or any obligation under this order is prevented or delayed by reasons of any such event for a period exceeding 180 days, the purchaser and the contractor shall meet to find a natural agreement to any effect resulting the reform or the purchaser may at his option cancel order provided also that if the order is cancel the order provided also that if the order is cancelled under this clause, the purchaser shall be at liberty to take over from the contractor at order prices all unused, un-damaged and acceptable material bought out components and stores in course of manufacture in the possession of the supplier at the time of such cancellation or such portion thereof as the purchaser may deem fit accepting such material, bought out components and stores as the supplier may with the concurrence of the purchaser elect to retain.

15. TECHNICAL MANUALS & DRAWINGS

Contractor shall furnish two copies of comprehensive technical manuals for use by the operation staff at DDK, Chennai. One set of technical manuals, drawings etc., should be submitted to this office also. Such manuals shall contain instructions from the preventive as well as routine maintenance of the Cooling Tower and accessories. The contractor shall also furnish copies of approved wiring diagrams, schematics, etc., for various items of equipment.

16. CANCELLATION:

The purchaser reserves the right to cancel the order in the event of non-performance / delay in performance or unsatisfactory performance by the contractor and recover payment already made if any, along with losses/ damages incurred. In such case, the performance guarantee / EMD submitted from the supplier end will be forfeited.

17. (a) The contractor shall remain responsible for proper execution of the work according to specifications and direction of the Dy. Director General (Engg). In the event of loss or damage to Government property or materials directly handed over to the contractor or otherwise existing in the premises where work is being executed by the contractor at any stage of progress of the work, the Dy. Director General (Engg) shall have option to decide impose penalty on the basis of primary available evidence.

On the contractor's failure to comply, the Dy. Director General (Engg) shall have the right to deduct the amount of damage so assessed from the interest arising from the security furnished of from any sum including the security deposit which may be due or may due to the contractor by Government on any account whatsoever. The contractor is to be held responsible for and to make good all injuries, damages and repairs occasioned or rendered necessary to the said tools and accessories and other materials by fire or other causes and to hold the President harmless from any claims or injuries to persons or for structural damage to property happening from any neglect, default, want of proper care or misconduct on the part of the contractor or of any one in his employ during the execution of the work.

b) If the contractor or his workers or servants shall break, deface, injure or destroy any portion of the premises in which they may be working or any building, road, road curbs, fence, enclosure water pipes, cables drains electric or telephone posts or wires, trees, grass or grassland or cultivated land, contiguous to the premises on which the work or any part of it is being executed, the contractor shall make good the same at his own expense.

c) If the contractor or his workers or servants meets any accident during execution of work, no compensation will be paid from the department side. Contractor should make insurance to their workers and labour law laid by the labour commission should be strictly followed.

Deputy Director General (Engg)
Doordarshan Kendra
Swami Sivananada Salai
Chepauk, Chennai - 600005

Annexure - III

SCHEDULE OF MATERIAL/WORKS

Sl. No.	Description of Item	Rate	Quantity	Amount
1.	200TR FRP Cylindrical Bottle shape Induced draft Cooling Tower including packing, forwarding & insurance etc.		2 Nos.	
2.	Installation of 200TR Cooling Tower on building terrace.		2 Nos.	
3.	Preparation & casting of foundation for 200TR Cooling Tower.		1 Job.	
4.	Assorted pipes required for installation of 200TR Cooling Tower.		1 Lot.	
5.	Preparation and making connection from existing 200TR Cooling tower water pipe line to new proposed 200TR Cooling Tower including material & labour charge.		1 Job.	
6.	Dismantling of existing 200TR Bottle shape Cooling Towers (2 Nos.) and storing the same in Ground floor.		1 Job.	
7	Making Electrical connection to the Fan motor of the 200TR Cooling Tower including material & labour charge.		1 Job.	
8	Any other assorted items essentially required.		1 Lot.	
9	Any other assorted works essentially required.		1 Job.	
	TOTAL			
	VAT/CST if any			
	Service Tax if any			
	Reduction if any			
	GRAND TOTAL			
10	Buyback offer for the existing cooling tower.		2 Nos.	
11	Buyback offer for the proposed new cooling tower after 2 years		2 Nos.	
12	Buyback offer for the proposed new cooling tower after 3 years		2 Nos.	

Sl. No.		DD Specification	Compliance (Yes/No)	Parameters of the equipment offered.	Deviations, in case of non-compliance	Optional items if any required to make the system Compliant to DD specs.	Features in the system offered which exceed DD specs.
1	**200TR Cylindrical Bottle shape Induced draft Cooling Tower:**						
a)	Make	Reputed make					
b)	Type	Induced Draft Cylindrical Bottle shape Counter flow.					
c)	No. of Cells	One					
d)	Water Circulating Rate	3000 LPM (approx.)					
e)	Water inlet Temperature	36° C					
f)	Water outlet Temperature	30° C					
g)	Range	5° C or better					
h)	Approach	5° C or better					
g)	Wet bulb Temperature	27° C					
h)	Heat Rejection Capacity	7500000 K. Cal/Hr or better					
i)	Operating Voltage	AC 3-phase 415V, 50 Hz					
j)	Sump Capacity	3500 Ltr.					
k)	Dimension	4200mm X 4300mm					
2	**Material of Construction:**						
a)	Frame work, Bolt & Nuts and Misc. Hardware	M.S. Hot dip galvanized .					
b)	Casing, Basin/Sump Material	FRP with Gel coating.					
c)	Fills	PVC					
3	**FAN:**						
a)	Fan Motor	5HP or better, IP55 Protection, Class ‘F’ insulation.					
b)	Fan Type	Direct Drive, Axial Flow, **top mounted**.					
c)	Fan Hub & Blade Material	Aluminum extrusion with FRP					
d)	Fan Make	Reputed make					
4	EMD	Demand Draft amounting to Rs. 14,000/-					

5	TWO BID SYSTEM	Envelop (1) should contain EMD, Envelope (2) should contain Technical bid and Envelope (3) should contain Price bid. All 3 envelopes should be placed on a large size envelope and should be sealed with red lac or wax.					
6	Details about attendance of pre-bid meeting.	Attendance of pre-bid meeting is minimum qualification criteria.					
7	TIN/VAT/CST/PAN Registration numbers.	Tenderer should indicate their TIN/VAT/CST registration number and PAN number with proof.					
8	Buyback quote.	The bidder should quote the buyback value for the existing cooling towers and also should quote the 2^{nd}, 3^{rd} and 4^{th} year buy back values for the newly supplied Cooling Towers					